ARCHIVES OF THE TURKISH SOCIETY OF CARDIOLOGY

Official journal of the TURKISH SOCIETY OF CARDIOLOGY

Subacute Myocardial Infarction Complication: Partial Myocardial Rupture

Subakut Miyokardiyal Enfarkt Komplikasyonu: Kısmi Miyokardiyel Rüptür mü?

CASE IMAGE
OLGU GÖRÜNTÜSÜ

A 32-year-old male presented to the emergency department with subacute inferior myocardial infarction. Pathological Q waves were observed in the inferior leads on an electrocardiogram. The patient had pain 2 days before going to the emergency service and he applied to the emergency service when chest pain recurred. Coronary angiography was performed; the circumflex artery (CX) was totally occluded at the level of obtuse 1 side branch. The CX lesion was revascularized successfully. There was mild hypokinesia on the mid and apical segment of the inferoseptal wall and severe hypokinesia on the inferior and posterior walls at echocardiographic evaluation. The ejection fraction was calculated as 50%. Major valve disease was not detected. A canal-shaped defect with a width of 6 mm and a length of 14 mm was detected in the muscular interventricular septum (Figure 1). The right ventricular side of the duct was seemed to be closed. Interventricular shunt flow was not observed in color Doppler examination (Video 1*). The existing duct was thought to be a partial rupture of the myocardium (Figure 2, Video 2*). Cardiac magnetic resonance imaging (MRI) was performed and reported an 11 mm wide and 20 mm long cleft in the septum with an intact right ventricular side (Figure 3-4). Around the cleft, a decreased signal on myocardial tissue was detected at cardiac MRI evaluation. According to the morphological features, this defect was evaluated as post-myocardial infarction partial septal rupture rather than a congenital myocardial cleft. The patient was presented to the cardiovascular surgery–cardiology council. Surgery was not considered because the rupture was self-limiting. No cardiac murmur was heard in the follow-up and no sign of hemodynamic decompensation was observed. On the fifth day of hospitalization, the patient was

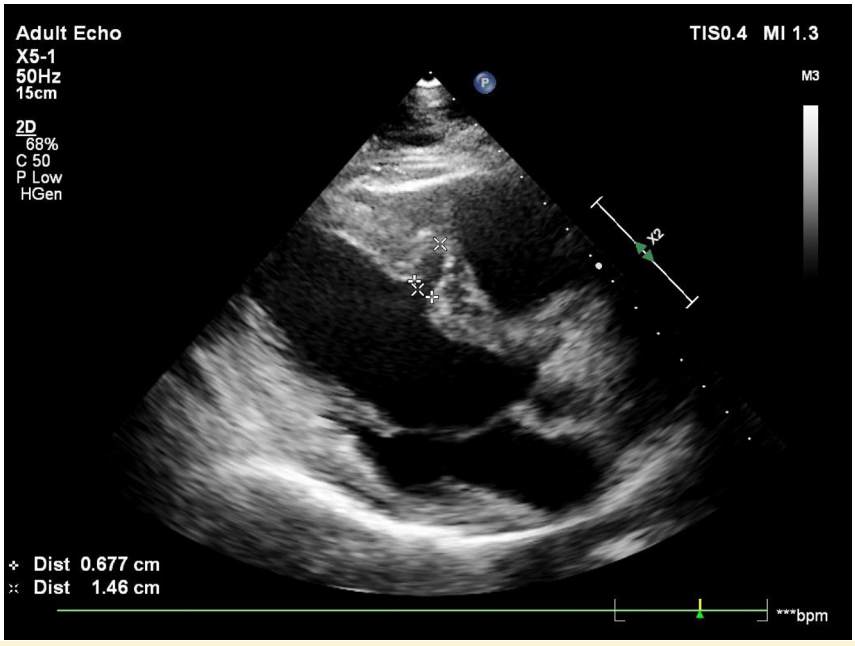

Figure 1. View of partial myocardial rupture from the parasternal long axis.

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Received: November 5, 2021
Accepted: February 28, 2022

Cite this article as: Akkan G, Özdemir E. Subacute myocardial infarction complication: Partial myocardial rupture. Turk Kardiyol Dern Ars. 2022;50(3):233-234.

DOI:10.5543/tkda.2022.21258

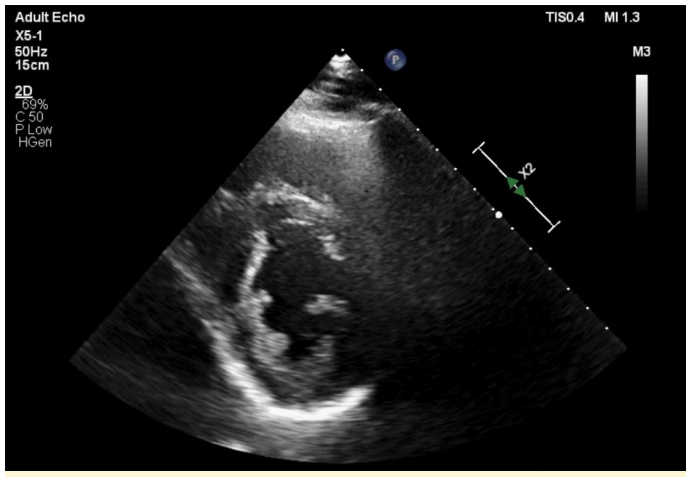

Figure 2. View of the defect from the parasternal short axis.

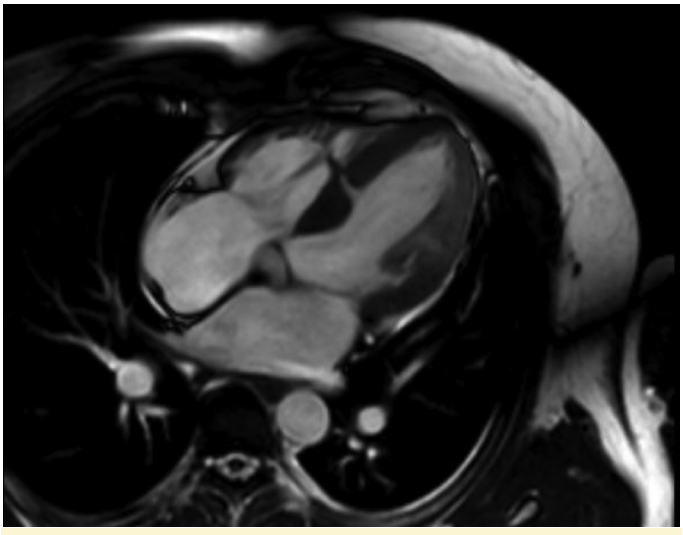

Figure 3. View of partial myocard rupture on cardiac MRI.

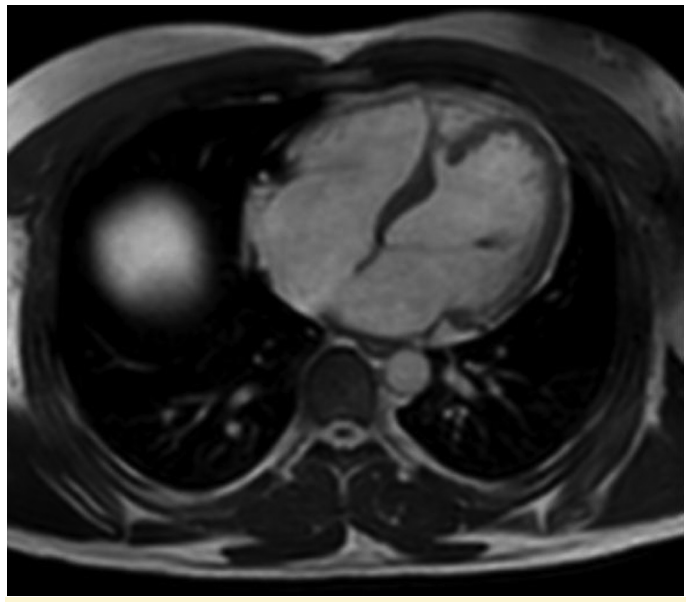

Figure 4. View of the defect on cardiac MRI.

discharged. Echocardiographic examination at the second month of follow-up showed that partial rupture of myocardium persisted (Video 3*) and no interventricular shunt was observed. The patient was clinically well and had no complaints.

Informed consent was obtained from the patient for the publication of the case image and the accompanying images.

*Supplementary video files associated with this article can be found in the online version of the journal.